

IN THE CLAIMS:

Kindly CANCEL claims 1-20 without prejudice or disclaimer.

1-20. (cancelled).

Kindly ADD new claims 21-32 as follows.

21. (new) A peristaltic machine, comprising:
a flexibly deformable tubing section for receiving viscous material;
a primary roller to cyclically move in a forward direction and a rearward direction about an oval travel path;
a secondary roller to cyclically move in the forward direction and the rearward direction about a linear travel path,
wherein the primary roller compresses the tubing section to the secondary roller during a first portion of the oval travel path and does not compress the tubing section during a second portion of the oval travel path.

22. (new) The peristaltic machine according to claim 21, further comprising:

means connected to a forward portion of the tubing section forward of the primary and second rollers to alternately constrict and unconstrict the forward portion of the tubing section in synchronism with forward movement by the primary and secondary rollers.

23. (new) The peristaltic machine according to claim 22, wherein the constricting means continuously constricts the forward portion of the tubing section to closure until execution of the forward movement by the primary and secondary rollers.

24. (new) The peristaltic machine according to claim 22, wherein the constricting means partially constricts the forward portion of the tubing section during the forward movement by the primary and secondary rollers and unconstricts the tubing section after completion of the forward movement to thereby draw back the viscous material in a reverse direction from an output end of the tubing section.

25. (new) A peristaltic machine, comprising:
a machine body;
a flexibly deformable tubing section connected to the machine body and adapted to receive viscous material means connected to the machine body to compress a first portion of the tubing section and propagate the compression forward to propagate the viscous material forward; and
a flow control unit connected about a portion of the tubing section forward of the compression means alternately constricting and unconstricting the tubing section in synchronism with propagation of the forward compression.

26. (new) The peristaltic machine according to claim 25, further comprising:

a movable carriage connected to an output end of the tubing section and controlled to move about a predetermined path with respect to the machine body.

27. (new) The peristaltic machine according to claim 26, wherein said flow control unit is disposed on said movable carriage.

28. (new) The peristaltic machine according to claim 25, wherein said flow control unit is disposed on the machine body.

29. (new) The peristaltic machine according to claim 25, said flow control unit further comprising:

first means to alternately allow or block output of the viscous material from the tubing section and

second means to maintain partial constriction of the tubing section during flow of the viscous material and to release the partial constriction upon completion of flow of the viscous material to partially draw back the viscous material into the tube.

30. (new) The peristaltic machine according to claim 29, wherein the first means is disposed on said machine body and the second means is disposed on said movable carriage.

31. (new) A peristaltic machine, comprising:

a machine body;

a flexibly deformable tubing section connected to the machine body and configured to receive viscous material at a first end;

primary and secondary rollers to compress the tubing section and move forward along the tubing section to propagate the viscous material forward;

a movable carriage supporting a second end of the tubing section and configured to move with respect to the machine body during forward propagation of the viscous material; and

means disposed on the movable carriage for controlling output of the viscous material from the tubing section.

32. (new) The peristaltic machine according to claim 31, further comprising:

a draw back control unit mounted on said carriage and connected to output ends of the tubing section, wherein said draw

back control unit partially constricts the tubing section during propagation of the material by said peristaltic unit and unconstricts each of the tubing section after propagation of the material by said peristaltic unit to thereby draw back the viscous material in a reverse direction from the output ends of the tubing section.